

## Morse, W. Travis SPK

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**From:** Aleta Powers [apowers@eroresources.com]  
**Sent:** Thursday, August 18, 2011 7:50 AM  
**To:** Morse, W. Travis SPK  
**Subject:** FW: SPK-2011-00608  
**Attachments:** Bianco SPK-2011-00608 08-08-11.pdf

**Importance:** High

Hi Travis,

This was sent last Monday--I noticed that I had the Corps number wrong in the "subject line". Sorry about that.

Please repond to let me know if you got this ok.

Thanks!  
Aleta

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**From:** Aleta Powers  
**Sent:** Monday, August 08, 2011 10:27 AM  
**To:** Travis Morse ([w.travis.morse@usace.army.mil](mailto:w.travis.morse@usace.army.mil))  
**Cc:** [sdougherty@eroresources.com](mailto:sdougherty@eroresources.com); J. Bianco  
**Subject:** SPK-2001-00608

Good morning Travis,

Thank you so much for taking the time to discuss the Bianco's ATF permit request with me on Thursday. Attached is a letter requesting coverage, ATF, under RGP 53 (RGP 96-07). The letter also provides the additional information you requested from the Biancos. Please feel free to give me a call anytime.

Sincerely,

Aleta Powers  
Environmental Scientist/Principal

ERO Resources Corporation  
Consultants in Natural Resources and the Environment P.O. Box 932 | 161 South 2nd St. |  
Hotchkiss, CO 81419 970.872.3020 O | 303.868.6361 C | [apowers@eroresources.com](mailto:apowers@eroresources.com) |  
[www.eroresources.com](http://www.eroresources.com) <<http://www.eroresources.com/>>

We moved! Please note our new mailing and street addresses.



August 8, 2011

U.S. Army Corps of Engineers  
Attn: Travis Morse  
400 Rood Ave, Room 134  
Grand Junction, CO 81501

RE: SPK-2011-00608  
James and Kay Bianco Property, Grand Lake, Colorado

Dear Mr. Morse:

This letter is in response to your letter to James and Kay Bianco, SPK-2011-00608, dated July 18, 2011. The letter states that the Corps has concluded that the Biancos are in violation of the Clean Water Act. The Corps noted that approximately 120 linear feet of riprap was placed along the East Inlet of Grand Lake and fill material was placed in approximately 0.17 acre of wetlands. The review and quantification of this emergency work occurred during your June 29, 2011 site review. ERO understands that, because of prior coordination by the Biancos with the Corps in 1991 and 1997-1998, the Corps was obligated by interagency MOU to refer this matter to the EPA. This prior coordination involved other portions of the Bianco's property and did not involve stream bank stabilization of the East Inlet.

The Biancos believed at the time of the emergency work that notification to the Corps was not required. They are committed to resolving this matter as quickly as possible, and offer voluntary restoration of disturbed areas adjacent to the inlet. Proposed restoration activities include applying a wetland seed mix to disturbed areas, completing tree plantings, and installing willow staking adjacent to riprap stream bank protection, where appropriate. For activities related to stump grubbing and grading activities, ERO has reviewed documentation of the site and the area is a complex wetland mosaic with upland and wetland areas intermixed with wetland characteristics not readily apparent to the layperson. Stump grubbing and site leveling activities have resulted in grade changes of less than 6" deep, and vegetation is re-establishing naturally.

Regarding the emergency bank stabilization activities, the Biancos were notified by a Northern Colorado Water Conservancy District (NCWCD) Gage Operator that snowpack in the East Inlet Creek watershed was 280% of normal and that an estimated 6-foot rise in creek elevation was imminent. These fears were confirmed during an April 26<sup>th</sup> site visit with NCWCD supervisor Mr. Noble Underbrink. On the 26th of April the Biancos met with Mr. Underbrink and another representative from the NCWCD at the site. Mr. Underbrink confirmed that snowpack was 280%

Denver  
1842 Clarkson St.  
Denver, CO 80218  
303.830.1188

Boise  
3314 Grace St.  
Boise, ID 83703  
208.373.7983

Durango  
1065 Main Avenue  
Durango, CO 81301  
970.422.2136

Western Slope  
P.O. Box 932  
161 South 2<sup>nd</sup> St.  
Hotchkiss, CO 81419  
970.872.3020

above normal, and stated that he expected the spring melt to be 5 to 6 feet above the existing stream bank. The Biancos sincerely feared damage to their property, and to downgradient property owners and structures, from the imminent flood damage based on these communications. Local news sources and local government also warned of flood damage (see attached brochure).

On behalf of Jim and Kay Bianco, ERO respectfully requests that the emergency work be authorized after-the-fact (ATF) under Sacramento District Regional General Permit (RGP) No. 53. RGP No. 53 for work in floodplains and that covers the following activities:

The District Engineers for the Albuquerque, Omaha and Sacramento Districts have re-issued Regional General Permit 96-07 (GP 96-07), originally issued on May 14, 1996. The permit authorizes certain flood-related fill or excavation activities, other work associated with flood protection, and repair work for flood-damaged areas performed in waters of the US within the state of Colorado. Waters of the United States include, but are not limited to, rivers, lakes, ponds, creeks, gulches and wetland areas. This GP may apply to localized or widespread flood events and includes, but is not limited to, the following activities:

- repair and reconstruction of existing roads
- temporary levee construction and repair
- bridge embankment repair
- protection and/or repair of utility structures
- bank protection/stabilization
- protection and restoration of intake structures.

Fill and excavation impacts authorized by this GP will be limited to the minimum necessary for the project. The maximum limits are as follows:

1. **One (1) acre** of impacts to non-wetland jurisdictional areas.
2. **1/3 acre** of impacts to wetlands.
3. Up to **one (1) acre** of wetlands impacts if, with consultation with other Federal and state agencies, the Corps of Engineers determines that the adverse environmental impacts are minimal. This one-acre limit is evaluated prior to considering mitigation.
4. After combining all impacts to waters of the US, including wetlands, the total of all impacts to waters of the US will not exceed **one (1) acre**, for each flood-related activity (*Section 404 Regional General Permit 96-07, Flood-related Activities in Colorado*).

RGP No. 53 is appropriate for ATF authorization of the emergency work performed by the Biancos to protect their property because the work meets the above authorization requirements and the following permit conditions:

- 1) You must maintain the activity authorized by this permit in good condition and in conformance with the terms and conditions of this permit. You are not relieved of this requirement if you abandon the permitted activity, although you may make a good faith transfer to a third party in compliance with General Condition 3 below. Should you wish to cease to maintain the authorized activity or should you desire to abandon it without a good faith transfer, you must obtain a modification of this permit from this office, which may require restoration of the area.

*Response: The Biancos are committed to maintain the bank stabilization in good condition.*

- 2) If you discover any previously unknown historic or archeological remains while accomplishing the activity authorized by this permit, you must immediately notify this office of what you have found. We will initiate the Federal and state coordination required to determine if the remains warrant a recovery effort or if the site is eligible for listing in the National Register of Historic Places.

*Response: No historic or archaeological remains were discovered during the work. The Biancos are committed to notify the Corps in the instance of historic or archaeological remains.*

- 3) If you sell the property associated with this permit, you must obtain the signature of the new owner and forward a copy of the permit to this office to validate the transfer of this authorization.

*Response: The Biancos are committed to notify the Corps in case of an ownership transfer.*

- 4) You must allow representatives from this office to inspect the authorized activity at any time deemed necessary to ensure that it is being or has been accomplished in accordance with the terms and conditions of your permit.

*Response: The Biancos will allow Corps representative access for inspection.*

- 5) The time limit for applying for flood related repair activities is one (1) year following the flood event.

*Response: This requirement has been met.*

- 6) The time limit for completing the work authorized by this GP is six (6) months from the permit issuance date. If additional time will be needed to complete the authorized activity, a written request for a time extension must be submitted to the Corps at least four (4) weeks before the permit expires. The request should include justification for an extension.

*Response: All work has been completed except for the restoration to which the Biancos have committed.*

- 7) No activity is authorized under this permit which is likely to jeopardize the continued existence of a threatened or endangered species or a species proposed for such designation, as identified under the Endangered Species Act, or which is likely to destroy or adversely modify the critical habitat of such species. When appropriate, the Corps will consult with the U.S. Fish and Wildlife Service (USFWS) on specific requests to perform work under this GP when a project may affect a threatened or endangered species.

*Response: No effects to threatened or endangered species have resulted or would result from the work completed.*

- 8) An activity which may affect historic properties listed, or eligible for listing, in the National Register of Historic Places is not authorized by this general permit until the Corps has complied with Appendix C of 33 CFR 325 and the latest Corps interim



guidance with respect to Appendix C. As of the effective date of this reissue of GP 96-07, interim guidance is found in the April 25, 2005 document, Revised Interim Guidance for Implementing Appendix C of 33 CFR Part 325 with the Revised Advisory Council on Historic Preservation Regulations at 36 CFR 800. The applicant must notify the Corps if the activity may affect any historic properties listed, determined to be eligible for listing, or which the applicant has reason to believe may be eligible for listing in the National Register of Historic Places, and will not begin the activity until notified by the Corps that the requirements of the National Historic Preservation Act have been satisfied and that the activity is authorized. In the event that subsurface archaeological resources are encountered during ground disturbing activities, the work will be halted until such resources can be evaluated in consultation with the State Historic Preservation Officer.

*Response: No effects to cultural resources have occurred as a result of the work completed. The Biancos are committed to notify the Corps in the instance of historic or archaeological remains.*

- 9) Channel restoration work will be limited to restoring the area to pre-flood contours and conditions unless a determination has been made, and the Corps agrees, that a realignment of the channel or changes in grades are necessary for restoration. Straightening of a channel is prohibited.

*Response: No channel restoration work or straightening of the channel occurred during completion of the work.*

- 10) Temporary levees, temporary access roads, and other temporary fills must involve the least damaging alternative and have minimum impact to waters of the United States. Appropriate measures must be taken to maintain near normal downstream flows to minimize additional flooding. Construction of permanent levees or access roads is not authorized by this GP.

*Response: No temporary levee, access road, or placement of temporary fill occurred during completion of the work.*

- 11) All fill must be of suitable materials and placed in such a manner that the material will not be eroded by expected high flows (in most cases instream material is not suitable fill, as it will erode during high flows). If the use of streambed material is authorized for bank stabilization and erosion control, it must be stabilized with vegetation or appropriate rock protection. The following materials are prohibited or restricted as fill material under this permit:

- Vehicle bodies, farm machinery and metal junk, including appliances, containers and barrels (including plastic barrels) are prohibited
- Asphalt will not be used for bank stabilization or erosion control, and old or used asphalt will not be used as a fill material
- Biodegradable building materials, including wood debris, sheet rock, roofing materials, and chemically treated materials subject to leaching when placed in an aquatic environment are prohibited;
- Trees and treetops are prohibited unless properly anchored;
- Tires are prohibited
- The use of clean brick and broken concrete will be allowed on a case-by-case basis (broken concrete should be free of exposed rebar and old asphalt).

*Response: No placement of prohibited fill occurred during completion of the work. Material used for bank stabilization consisted of cobble/rock material of*

*appropriate size for anticipated flow volumes and velocities as demonstrated by the bank stabilization successfully performing during the recent high flows.*

- 12) Proposed wetland fill or drainage activities authorized by this permit will require mitigation. Mitigation plans will be developed by the applicant, approved by the Corps, and coordinated with the applicable resource agencies on a case-by-case basis. In appropriate situations, approval of mitigation plans by the Corps may be subsequent to approval of the requested work, since sufficient time may not be available to approve mitigation before the work must take place.

*Response: The Biancos are committed to voluntary restoration of wetland fill areas, including application of wetland seed mix, tree plantings, and willow stakings. On approval of this request for ATF authorization under RGP 53, the Biancos will provide additional details for restoration.*

- 13) All fill material will be obtained from a non-wetland source.

*Response: No fill was obtained from wetlands for bank stabilization activities.*

- 14) All temporary fills in waters of the United States, including sandbags, straw or hay bales with string or wire, must be completely removed and the area restored to pre-project conditions and contours within 30 days of the end of the flood event.

*Response: No temporary fills such as sandbags, straw or hay bales, or other types of temporary fills were used during completion of the work.*

- 15) All areas disturbed by construction, which will not be ripped, will be seeded/planted for protection against subsequent erosion and to minimize adverse impacts to fish and wildlife resources (this includes both herbaceous and woody species that are indigenous to the area).

*Response: The Biancos are committed to voluntary restoration of wetland fill areas, including application of wetland seed mix, tree plantings, and willow stakings. On approval of this request for ATF authorization under RGP 53, the Biancos will provide additional details for restoration.*

- 16) The clearing of vegetation, including trees located in or immediately adjacent to waters of the United States, will be limited to that which is absolutely necessary for construction of the project.

*Response: Vegetation clearing that occurred during bank stabilization activities was limited to the minimum amount possible.*

- 17) Equipment for handling and conveying materials during construction will be operated to prevent dumping or spilling the materials into the water except as approved herein. Construction equipment will not be operated in flowing water to the maximum extent practicable.

*Response: Equipment was operated to prevent dumping and spilling of materials except to specifically apply bank stabilization materials in an appropriate manner; construction equipment operation in flowing water was minimized to the maximum extent practicable.*

- 18) All dredged or excavated materials, with the exception of that authorized herein, will be placed on an upland site above the ordinary high water line in a confined area, not classified as a wetland, to prevent the return of such materials to the waterway.

*Response: Materials placed during bank stabilization activities were used appropriately and comply with the above condition.*

- 19) Concrete trucks will be washed at a site and in such a manner that washwater cannot enter a waterway or wetland.

*Response: No concrete was using during bank stabilization activities.*

- 20) During construction, petroleum products, chemicals, or other deleterious materials will not be allowed to enter or be deposited, in waters of the United States. Precautions will be taken to prevent entry of these materials into waters of the United States. Any unauthorized release of petroleum products, chemicals, or other deleterious materials into waters of the United States will be reported immediately to the Colorado Environmental Release and Incident Reporting Line at 1-877-518-5608.

*Response: No petroleum products, chemicals, or other deleterious materials were allowed to enter waters of the U.S. during bank stabilization activities.*

- 21) All work in the waterway will be performed in such a manner so as to minimize increases in suspended solids and turbidity which may degrade water quality and damage aquatic life outside the immediate area of operation.

*Response: Bank stabilization materials were placed immediately adjacent to the existing waterway, in a manner minimizing impacts to water quality.*

- 22) All earthwork operations on the bank will be carried out in such a manner that sediment runoff and soil erosion to the waterbody are controlled.

*Response: Sediment runoff and soil erosion control was the intent of the bank stabilization, and earthwork was completed during bank stabilization activities to achieve this goal.*

- 23) If and when the District Engineer has been notified that a dredging or filling activity is adversely affecting fish or wildlife resources or the harvest thereof and the District Engineer subsequently directs remedial measures, the permittee will comply with such directions to suspend or modify the activity to the extent necessary to mitigate or eliminate the adverse effect as required.

*Response: The Biancos are committed to remediation of impacts to fish or wildlife resources. At this juncture, no impacts to fish or wildlife resources are evident.*

- 24) If the Corps is notified that work being performed does not comply with or fall within the scope of this General Permit, the responsible party will take immediate steps, as directed by the Corps, to bring the work into compliance with this permit.

*Response: The Biancos are committed comply with the conditions of RGP 53.*

- 25) The District Engineer may require that additional special conditions be included in any authorization issued under this General Permit to avoid, minimize or compensate for adverse environmental impacts.

*Response: The Biancos are committed to reasonable special conditions to mitigate for adverse environmental impacts. At this time, it appears that the voluntary restoration activities proposed would be adequate.*

- 26) Any activity authorized under this permit may not occur in a component of the National Wild and Scenic River system, or in a river officially designated by Congress as a "study river" for possible inclusion in the system, while the river is in an official study status.

*Response: The East Inlet Creek is not a component of the National Wild and Scenic River system, nor is it a "study river".*

- 27) An activity may not impair reserved tribal rights, including, but not limited to, reserved water rights and treaty fishing and hunting rights.

*Response: There are no reserved tribal rights for fishing or hunting on the East Inlet Creek.*

- 28) This permit does not obviate the need to obtain other federal, state, or local authorizations as required by law, does not grant any property rights or exclusive

rights to others, and does not authorize interference with any existing or proposed federal project.

*Response: The Biancos understand this condition.*

- 29) For any activity that the District Engineers determines to have more than minimal adverse environmental effects, individually or cumulatively, or may be contrary to the public interest, an individual permit may be required.

*Response: The Biancos respectfully assert that no more than minimal adverse environmental effects have occurred from the bank stabilization activities, and that no action on their property is contrary to the public interest.*

- 30) In issuing this permit and giving approval to perform work under this permit, the Federal Government does not assume any liability for damages to the permitted project, or uses thereof, as a result of current or future activities undertaken by or on behalf of the United States in the public interest; damages to persons, property, or to other permitted or unpermitted activities or structures caused by the activity authorized by this permit; design or construction deficiencies associated with the permitted work; or damage claims associated with any future modification, suspension, or revocation of this permit.

*Response: The Biancos understand this condition.*

- 31) Corps representatives will be allowed to inspect the authorized activity at any time deemed necessary to ensure that it is being or has been accomplished in accordance with the terms and conditions of this permit.

*Response: The Biancos will allow Corps representatives access for inspection.*

- 32) The State of Colorado has certified the activities authorized by this permit under Section 401 of the Clean Water Act. The Environmental Protection Agency must individually certify the activities in Indian Country authorized by this permit. To obtain water quality certification in Indian Country, write to the Environmental Protection Agency, Eco-Systems Protection and Remediation Program, 999 18th Street, Suite 500, Denver, Colorado 80202. The certification from EPA, for a project in Indian Country, should accompany the application.

*Response: No Indian Country requirements are applicable.*

- 33) The Corps may reevaluate its decision on any authorization given in accordance with this permit at any time that circumstances may warrant. Circumstances that could require a reevaluation include, but are not limited to the following:

- o failure to comply with the terms and conditions of the permit;
- o the information provided in support of the application proves to be false, incomplete, or inaccurate; and
- o significant new information surfaces which the Corps did not consider in reaching a decision.

*Response: The Biancos understand this condition.*

In summary, James and Kay Bianco request that the emergency bank stabilization work on their property is authorized ATF by RGP No. 53 and the Biancos have voluntarily agreed to restore the wetland areas by applying an approved wetland seed mix, willow staking, and planting trees. Much of the area is revegetating on its own. Willow staking will be placed in and around the riprap bank stabilization to provide vegetative cover and additional stabilization. The restoration in both the wetland and upland areas will provide vegetative buffers and add to the overall landscape

U.S. Army Corps of Engineers  
Attn: Travis Morse  
400 Rood Ave, Room 134  
Grand Junction, CO 81501

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functionality. The riprap as placed provides an important bank stabilization function, and with willows added will restore riparian functions along the banks. The Biancos request that the riprap be allowed to remain in place to protect their property, as well as downstream properties, and prevent future sedimentation in both East Inlet Creek and Grand Lake.

Attached is correspondence that you requested addressing the Bianco's roadway and post-tree removal grading, and a brochure from Grand County and local governments. The Biancos request copies of any complaint letters received by your office.

We look forward to working with you and the Biancos to resolve this matter as expeditiously as possible. Please feel free to contact me with any questions or additional information requests.

Sincerely,



Aleta S. Powers  
Environmental Scientist/Principal

Attachments

cc: Jim and Kay Bianco

# High Water

## Grand County High Water Information Guide



To Residents, Business Owners, and Visitors of Grand County:

With the heavy snowfalls this season, Grand County could realize the affects of the melting snow from mid-May through June. A packet of information has been assembled to inform the community about the impacts of high water. The Towns and County have prepared a plan of action and all departments are ready for a possible high water event!

Although Grand County is preparing for high water, no one can predict the spring weather, including warm temperatures and precipitation which will determine the rate of flow in the tributaries, creeks and rivers in Grand County. Local and State officials have been monitoring snowpack, flows in the various rivers, streams, and drainages and are prepared to respond to the possibilities of high water situations. Grand County has also participated in various meetings with local dam owners in order to prepare for water releases due to the over capacity of reservoirs or in anticipation of heavy run-off.

During spring run-off, the Public Works departments in the county will begin managing debris and obstructions in waterways. Sandbags will be available free of charge at various locations around the county and more information on sandbags is included in this packet.

On the following pages please find a summary of information, questions and answers assembled for your convenience to prepare for high water. Flood Insurance Rate Maps to assist you in locating your property and evaluating its proximity to the 100-year flood areas are available on-line at [www.fema.gov](http://www.fema.gov) or you may call the Planning Department in your town for information on your property.

Another great resource is [www.Ready.gov](http://www.Ready.gov) and the USGS site that monitors the flow (CFS-cubic feet per second) in area creeks and rivers and for other information as the spring melt situation unfolds.

In the case of a significant flooding event anywhere in the county, the county-wide Emergency Operations Center (EOC) will be activated and all entities and agencies with response authority will be participating and assisting to mitigate the event.

On behalf of the Grand County Government, Town of Fraser, Town of Granby, Town of Grand Lake, Town of Hot Sulphur Springs, Town of Kremmling, and the Town of Winter Park, thank you for your cooperation and concern.

Grand County Government  
Town of Fraser  
Town of Granby  
Town of Grand Lake  
Town of Hot Sulphur Springs  
Town of Kremmling  
Town of Winter Park



## INTRODUCTION

Cities and counties in all parts of Colorado, with the assistance of the federal and state government, have developed and are continuing to develop comprehensive emergency preparedness programs to reduce loss of life and protect property from disasters. Many lives are being saved by these programs. People are being warned of impending emergencies/ disasters, evacuated from danger areas, treated for injury, and helped to resume their normal lives after disaster strikes.

The primary purpose of this guide is to save lives, reduce injuries, and protect property. It is designed to present information and guidance on action to take to enhance survival in the event of natural and human caused disasters.

You can give yourself and your family a much better chance of surviving and recovering from major disasters if you will take time now to:

- Understand the dangers you would face in an emergency;
- Make your own preparations; and
- Learn what actions you should take at the time of the emergency.

This guide discusses preparation and emergency actions that will help people cope with the impacts of high water.





## **HIGH WATER PREPAREDNESS**

### **WHAT CAN CITIZENS DO TO PREPARE FOR AN EMERGENCY?**

#### ***Am I in a risk area:***

Do you live in a low-lying area susceptible to high water?

Do you know enough about high water risk?

The severity of local high water, and whether or not major high water occurs along tributaries, creeks and rivers in Grand County, depends mostly on the weather conditions during snowmelt in May and June. The weather determines when and how rapidly snowmelt occurs. Unusually high snowpacks naturally raise the possibility of high water, but risk is determined by a combination of events and conditions:

- Heavy, concentrated rain events
- Heavy rains mixed with spring's melting snow, creating excessive run-off into rivers and creeks
- Ice jams or debris— water upstream is blocked by ice or debris downstream

Remember that if rising waters become a threat to your safety, follow the instructions of local emergency officials who are involved in rescue or high water response operations, including those directing traffic, as water can be deeper than it appears. Keep disaster response routes clear.

#### ***Before a high water emergency:***

- Know if you live in a high water-risk area.
- Purchase flood insurance, if desired. (Note: There is a 30 day wait period)
- Prepare personal emergency supply kits for your home, car and work.
- Have a grab-and-go kit ready if you have to leave your home quickly.
- Keep important papers in watertight containers and have a record of your valuables in a safe place to help with insurance claims.
- Choose a relative or close friend out of the area as a contact person for family members and friends.
- If high water is likely in your area, pay attention to the local media for information.
- Watch for warning signs: increase in height and intensity of water flows, mudslides, debris in creeks, color changes in water, or leaning trees.
- Know that banks of rivers and streams may be unstable and dangerous.
- Teach your children about high water safety.
- Consider arrangements for your pets and any livestock.
- Check on elderly or disabled neighbors to ensure they are aware of the situation.
- Prepare an evacuation plan from your home to a safe location



***If you are at risk, there is much you can do now to prepare.***

High water may occur in the area where you live, and although your home may not be immediately affected, you may be cut off from outside resources (phone, electricity, safe drinking water, road access) and even some members of your household.

You should have in place, at all times:

- An emergency plan that every household member knows. The plan should include information on how to shut off electrical power and natural gas sources, safe meeting places out of the high water-risk area, an out-of-area contact, plans for pets and livestock, and a neighborhood safety plan that identifies people who may need extra help. Once you formulate your plan, rehearse it!
- An emergency supply kit containing non-perishable foods, bottled water, first aid kit, necessary medications, flashlights and batteries, personal toiletries, identification for each family member, some cash and any important family documents. Be prepared to be on your own for at least 72 hours, possibly longer. All perishable items should be changed or replaced every six months.
- Have a grab-and-go emergency kit ready for each member of your household as you may have to leave in the middle of the night or on short notice. This kit should have basic essential items such as prescription medications, eye glasses, important papers, flashlight, clothing, identification and some cash.
- A battery-powered or wind-up radio that allows you to access weather warnings and disaster instructions from local radio stations.
- A plan for protecting your home and the tools and items you may need to do so (wrenches for shutting off valves, plastic sheeting or sandbags).
- A full tank of gas in your vehicle.

***During a high water emergency:***

Rising water levels may indicate your home will become unsafe to be in and you will most likely have to evacuate. There are things you can do now to prepare if you are at high risk:

- Work in cooperation with Police, Public Works and Emergency personnel. Always follow the instructions given.
- Volunteer your time and energy to assist in efforts to protect city/town/county facilities and private property.



***During a high water emergency (continued):***

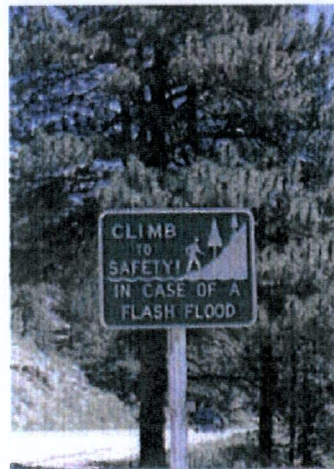
- Plan how you will leave and where you will go if you are advised to evacuate
- Make sure everything is in place for the possible evacuation of your pets and livestock.
- When you leave your home, don't forget to lock all your doors and windows.
- Prevent illness by understanding there is a possibility that drinking water may become contaminated. Listen for boil water advisories or other safety instructions from local emergency officials.
- Keep a stock of food that requires no cooking or refrigeration. Store drinking water in clean, closed containers.
- Keep in mind that high waters may make travel unsafe – know if there are different routes out of the area if high waters are impacting roads.
- Never attempt to drive through high water. Two (2) feet of water can carry away most cars. The most dangerous thing you can do is to try walking, swimming, or driving through high waters.
- Organize your homeowners association, neighbors and friends to assist with filling and placing of sandbags.
- Help a neighbor who may require special assistance – infants, elderly people, and people with disabilities.
- An oil tank will float if it isn't full. Stabilize your oil tank and weigh it down with sandbags or wedge it against a solid object.
- Anchor propane tanks. Both full and empty propane tanks will float. Turn off valves and anchor tanks to a solid object with a chain or cable.
- If you are instructed by local authorities, turn off all utilities at the main power switch and close the main gas valve.
- Dangerous chemicals such as weed killers, insecticides, fertilizers, and corrosives should be moved to a safe, dry area to reduce the dangers of chemical contamination, fires, explosions, and personal injuries.
- Identify dams in your area. Be aware of what could happen if they fail. Become familiar with local emergency action plans.



## HIGH WATER SAFETY

More deaths occur due to high water each year than from any other thunderstorm or hurricane-related hazard. Many of these casualties are a result of careless or unsuspecting motorists who attempt to navigate flooded roads. The National Weather Service now warns anyone who comes to a flooded roadway, "Turn around ... don't drown!"

- If high water occurs, get to higher ground. Stay away from high water-prone areas, including dips, low spots, valleys, ditches, washes, etc.
- Avoid flooded areas or those with rapid water flow. Do not attempt to cross a flowing stream. It takes only six inches of fast flowing water to sweep you off your feet.
- Don't allow children to play near high water, storm drains or ditches. Hidden dangers could lie beneath the water.
- Flooded roads could have significant damage hidden by high waters. Never drive through high waters or on flooded roads. If your vehicle stalls, leave it immediately and seek higher ground. Water only two feet deep can float away most automobiles.
- Do not camp or park your vehicle along streams and washes, particularly when threatening conditions exist.
- Be especially cautious at night when it is harder to recognize flood dangers.
- Monitor NOAA Weather Radio (162.525) west of Byers Canyon or your local media for vital weather-related information.





## **HIGH WATER PUBLIC WORKS ACTION PLAN**

### **WHAT CAN YOU EXPECT FROM PUBLIC WORKS?**

#### **Primary responsibilities of Public Works staff:**

- Monitoring rivers and streams in the city, towns and county.
- Managing debris which might impede the flow of water in creeks and culverts in public right-of-way.
- Evaluating levels of flooding and/or anticipated flood threat and determining needs.
- Establishing priorities for the protection of life safety, essential facilities, access roads, bridge structures and culverts.

### **CONTACT INFORMATION (during business hours):**

#### **Town of Fraser**

Police Department	(970) 722-7779
Public Works	(970) 726-8957
Floodplain Manager (Catherine Trotter)	(970) 726-5491

#### **Town of Granby**

Police Department	(970) 887-3007
Public Works	(970) 887-2448
Floodplain Manager (Wally Baird)	(970) 887-2501

#### **Town of Grand Lake**

Police Department	(970) 725-3343
Public Works	(970) 627-3583
Floodplain Manager (Shane Hale)	(970) 627-3435

#### **Town of Hot Sulphur Springs**

Police Department	(970) 725-3343
Public Works	(970) 725-3933

#### **Town of Kremmling**

Police Department	(970) 724-3318
Public Works	(970) 724-3528

#### **Town of Winter Park**

Police Department	(970) 722-7779
Public Works	(970) 726-8011
Floodplain Manager (Drew Nelson)	(970) 726-8081

#### **Grand County**

Sheriff	(970) 725-3343
Office of Emergency Management	(970) 887-2732
Road & Bridge	(970) 887-2123

AFTER BUSINESS HOURS CALL THE GRAND COUNTY COMMUNICATIONS CENTER	(970) 725-3343
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## HIGH WATER LAW ENFORCEMENT ACTION PLAN

**WHAT WILL THE LOCAL LAW ENFORCEMENT AND GRAND COUNTY SHERIFF'S OFFICE DO IN THE EVENT OF A HIGH WATER SITUATION?**

### **Duties of Law Enforcement:**

- Protect life (health and well-being of the community).
- Minimize the threat to people and property in response to flooding (via evacuation if necessary).
- Continue to provide essential law enforcement services.

### **Priorities:**

- Evaluate the threat level
  - 24-hour stream watch during peak run-off period
  - Communication with affected agencies
  - Obtain hydrologic information from relevant sources
- Identify actual affected areas
  - Life threatening potential
  - Need to evacuate
  - Secure affected area (traffic/crowds)
  - Establish and secure access to affected areas
- Secure property impacted by high water
  - Public property (local government infrastructure)
  - Private property (prevent looting)
- Continue to provide essential police services
  - Prioritize police response to requests for service
  - Additional manpower and other resources from local agencies





## **SANDBAGGING**

### **Public Works:**

- Although Public Works generally does not provide sandbagging services, you can contact your local Public Works office with questions (refer to contact information for appropriate contact numbers).

### **Sandbags provided free of charge locally at the following locations:**

#### **Limited Quantities Available**

##### **Grand County: All County Residents, Sand Provided**

Granby Road and Bridge Shop: 467 East Topaz, Granby  
Fraser Road and Bridge Shop: 350 GCR 5103, Fraser  
Parshall Road and Bridge Shop: 91 GCR 3, Parshall  
Kremmling Road and Bridge Shop: 1008 Railroad Ave, Kremmling  
Grand County Administration Building: 308 Byers Ave, Hot Sulphur Springs

##### **Fraser: Residents of Fraser, Sand Provided**

Public Works Shop: 125 Fraser Ave, Fraser

##### **Grand Lake: Residents of Grand Lake, Sand Provided**

Public Works Shop: 217 Marina Dr., Grand Lake

##### **Winter Park: Residents of Winter Park, Sand Provided**

Public Works Shop: 80500 Main St, Winter Park

Trying to determine how much sand and how many sandbags you might need?





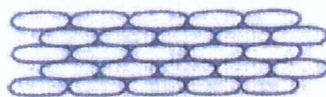
### **General sandbagging Information:**

- Do not stack sandbags against the outside walls of your home to keep water out. Stack sandbags away from house walls to prevent high water from reaching your home.
- When high water is likely, it is better to permit the high water to flow freely into the basement (or flood the basement yourself with clean water, if you are sure it will be flooded anyway). This will avoid structural damage to the foundation and the house by equalizing the water pressure on the outside of the basement walls and floors.
- Construct the sandbag dike on high ground, as close as possible to your home or building. By being closer to your home or building, fewer bags will be needed, and the sandbag dike will be less exposed to the tributary, creek or river.
- Sandbagging should also focus along existing flood works or any low spots along dikes for maximum protection.
- Dig a trench one bag in depth and two bags wide as a foundation for the dike structure.
- To be effective, a dike must be three times as wide as its base as it is high.
- Sandbags should be turned right side out and filled half full. They need not be tied shut, just laid overlapping each other.
- The open ends of the sandbags should be facing upstream and/or uphill so that the moving water will not remove the sand from the bags as readily.
- Alternate direction of sandbags with bottom layer, i.e., bottom layer lengthwise with dike, next layer crosswise.
- As individual bags are put in place, walk on bags to tamp them into place to ensure maximum strength. Take care to avoid puncturing the bags.
- The butt ends of the bags should be placed facing the stream, for rows that are perpendicular to the stream.
- Each successive layer should be set back one-half sandbag width on both sides in each additional layer so a completed dike has a triangular cross-section.
- The number of sandbags needed to protect a home or building varies depending on the local topography and the anticipated depth of water.



## RECOMMENDED METHOD FOR SANDBAG DYKING

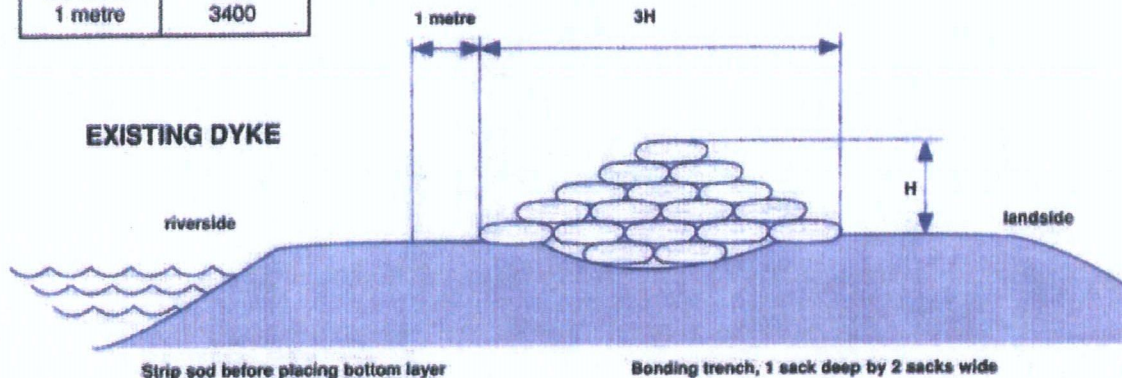
Bags Required for 100 Linear Feet of Dyke	
Height Above Dyke	Bags Required
1/3 metre	600
2/3 metre	2000
1 metre	3400



PLAN OF BOTTOM LAYER



METHOD OF LAPPING SACKS

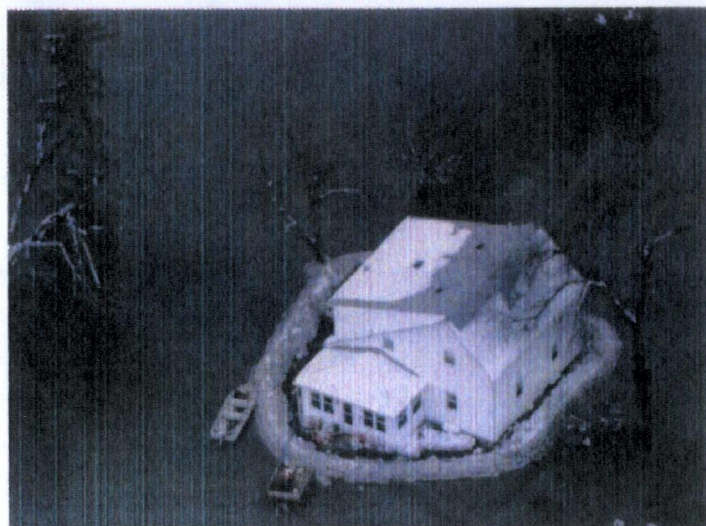


1. Alternate direction of sacks with bottom layer, i.e. bottom layer lengthwise with dyke, next layer crosswise.
2. Lap unfilled portion under next sack.
3. Tying or sewing of sacks not necessary.

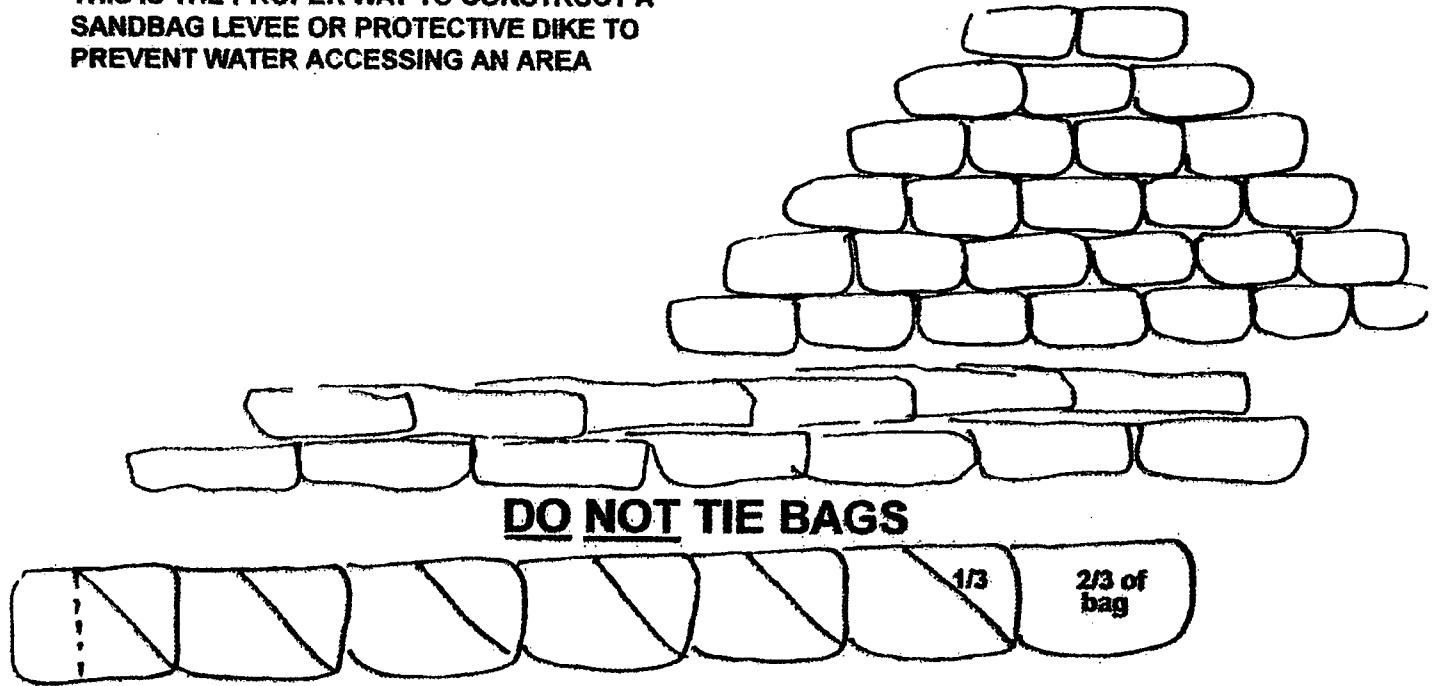
4. Sacks should be approximately one-half full of clay, silt or sand.
5. Tamp thoroughly in place.

### Clean-up Procedures After High Water:

- It is the responsibility of the homeowner to remove and dispose of sandbags at the end of the event.



**THIS IS THE PROPER WAY TO CONSTRUCT A  
SANDBAG LEVEE OR PROTECTIVE DIKE TO  
PREVENT WATER ACCESSING AN AREA**



**Only fill bags 1/2 to 2/3 full - note the lap made by the excess material - fold it diagonally in half and walk right down the top of the bags to compact. Each additional row ties the lower ones in.**



## **HIGH WATER PREPAREDNESS RESOURCES**

To watch the flow in area rivers & streams

go to

<http://waterdata.usgs.gov/co/nwis/discharge>

or

<http://cwcb.state.co.us>

303-866-3441

The Colorado Water Conservation Board (CWCB) is the state authority on the administration of flood insurance and information. They are actively engaging in preparatory activities and updating information on their website throughout the flood season.

### **Website links with flood information pertinent to Grand County homeowners:**

Certificates of Elevation can be obtained from a licensed PLS (surveyor) in the state of Colorado. Blank certificates and detailed instructions can be found on-line at the FEMA website: <http://www.fema.gov/library/viewRecord.do?id=1383>.

NFIP participating Municipalities can provide guidance on the basis of floodway/floodplain information available to them, but cannot verify all of the information provided to them. FEMA's Flood Insurance Rate Maps (FIRMs) are available at the Planning Departments for review by the public. They are also available on-line at the FEMA website: [www.fema.gov](http://www.fema.gov) then click on the 'FEMA flood map store' link (on the left side), then proceed to look for the flood map for your location.

- National Weather Service: <http://www.crh.noaa.gov/bou/>
- Federal Alliance for Safe Homes: [www.flash.org](http://www.flash.org) or 1-877-221-SAFE
- Flood Insurance: [www.floodsmart.gov](http://www.floodsmart.gov)
- Emergency Preparedness: [www.fema.gov](http://www.fema.gov) or [www.redcross.org](http://www.redcross.org) or [www.readycolorado.org](http://www.readycolorado.org) or [www.co.grand.co.us](http://www.co.grand.co.us) (Emergency Management)
- Colorado Water Conservation Board: [www.cwcb.state.co.us](http://www.cwcb.state.co.us)
- Flood Information: [www.floodsafety.com](http://www.floodsafety.com)
- Institute for Business and Home Safety: [www.ibhs.org](http://www.ibhs.org)
- U.S. Army Corp of Engineers: <http://www.usace.army.mil/Emergency/Pages/home.aspx>
- Colorado University Hazards Site: <http://www.colorado.edu/hazards/resources/web/floods.html>
- Flood Recovery and Related Health Issues: <http://www.ksre.ksu.edu/library/DesktopDefault.aspx?tabid=57>



## **FEMA FLOOD INSURANCE RATE MAPS**

Currently the Towns of Fraser, Granby, Grand Lake and Winter Park participate in the National Flood Insurance Program. Grand County does not participate in this program

Flood Insurance Rate Maps (FIRMs) are available as part of the National Flood Insurance Program.

The participating Municipalities can provide guidance on the basis of floodway/floodplain information available to them. FEMA's Flood Plain Insurance Rate Maps are available at your Municipality's Planning Dept. for review by the public or online by following the link below to FEMA's website.

[http://msc.fema.gov/webapp/wcs/stores/servlet/CategoryDisplay?storeId=10001&catalogId=10001&langId=&categoryId=12010&parent\\_category\\_rn=12010&type=9&stateId=&countyId=&communityId=&stateName=&countyName=&communityName=&isCountySelected=1&isCommSelected=1&userType=G&urlUserType=G&sfc=0&future=none&historic=true&cat\\_state=13012&cat\\_county=13327&cat\\_community=10113132iew](http://msc.fema.gov/webapp/wcs/stores/servlet/CategoryDisplay?storeId=10001&catalogId=10001&langId=&categoryId=12010&parent_category_rn=12010&type=9&stateId=&countyId=&communityId=&stateName=&countyName=&communityName=&isCountySelected=1&isCommSelected=1&userType=G&urlUserType=G&sfc=0&future=none&historic=true&cat_state=13012&cat_county=13327&cat_community=10113132iew). Additional information on flood maps and flood insurance is available at

<http://cwcb.state.co.us/>

then click on the "Flood Protection" tab on the left for the following:

- Colorado Flood and Weather Information
- FEMA Resources (maps, documents, technical guidance)
- Flood Insurance Information and Floodplain Maps
- Floodplain Management Presentations and Reports
- Forms and Documents (flood-related downloads)

(Please note: Flood insurance rate maps are available for your review and the various towns can answer general questions for the public. However, lending institutions, not the towns, determine whether flood insurance will be required for a property and the related liability potential.)

**Prepared by:**

**GRAND COUNTY EMERGENCY MANAGEMENT**

81 West Agate Ave  
PO Box 431  
Granby, CO 80446  
(970) 887-2732  
(970) 870-5561 (Fax)

Ray Jennings  
Chief  
[rjennings@co.grand.co.us](mailto:rjennings@co.grand.co.us)

Trevor Denney  
Emergency Manager  
[tdenney@co.grand.co.us](mailto:tdenney@co.grand.co.us)

Nowell Curran  
Public Information Officer  
[ncurran@co.grand.co.us](mailto:ncurran@co.grand.co.us)

**For emergency information in Grand County:**  
[www.gcemergency.com](http://www.gcemergency.com)

July 11, 2011

Mr. Travis Morse  
US Army Corps of Engineers  
400 Rood Avenue, Room 142  
Grand Junction, CO 81501-2563

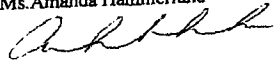
Dear Mr. Morse:

The Bianco's in Grand Lake have asked me to verify work done by us adjacent to the parking lot at the East Inlet on the Bianco property.

We were contracted to regrade and smooth out the area after all the dead trees had been removed. We did not bring in or add any fill to the area.

Sincerely,

Ms. Amanda Hammerlund



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Office Fax #  
970 627-8834  
Email:  
athspecialties@live.com  
PO Box 900  
Grand Lake CO 80447

July 11, 2011

Mr. Travis Morse  
US Army Corps of Engineers  
400 Rood Avenue, Room 142  
Grand Junction, CO 81501-2563

Dear Mr. Morse:

The Bianco's in Grand Lake, Colorado have asked me to verify certain facts they related to you concerning the roadway leading to their home. I was the Grand county surveyor for many years, and made numerous surveys in that area for previous owners.

This roadway has been in the county records and title reposts, for many years. I surveyed it several times back in the 60's and 70's, and am very familiar with the area. In 1991-92, I was present when Mr. Bianco met with a representative of the Army Corps of Engineers. At that time, the Bianco's wanted to build on the roadway for their auto access, we walked the roadway and we discussed procedures with your representative.

I can attest that the culverts, trenches along the 20' roadway, existed at that time (1991) and most likely many years prior.

Sincerely,

  
Mr. C.W. McClelland

Your Vote Appreciated for County Surveyor

*C. W. "Skip" McClelland*

COLORADO REGISTERED LAND SURVEYOR

GRANBY, COLORADO

PHONE 887-3565

BOX 188